3 DESCRIPTION OF ALTERNATIVES, INCLUDING THE PROPOSED ACTION

3.1 Proposed Action

The Proposed Action is an expansion of the existing Pipeline and South Pipeline Projects within the existing and approved area of surface disturbance. The expansion of the South Pipeline ore deposit would provide up to seven additional years of mining and processing beyond the 18 years of mining and processing outlined in the South Pipeline Final EIS (BLM 2000a, page 3-1) for a total of up to 25 years. There would be no additional surface disturbance beyond the 7,676 acres approved in the South Pipeline Final EIS (BLM 2000a) and reallocated under the Gravel Pit Expansion (CGM 2001b). The actions associated with the Proposed Action would consist of the following:

- Expand the Pipeline/South Pipeline open pit to the east, southeast, and southwest;
- Increase the depth of the Pipeline/South Pipeline open pit;
- Place or translocate a portion of the resulting waste rock into areas of the completed Pipeline/South Pipeline open pit;
- Increase the levels of the approved SAHL pad from a height of 250 feet to 300 feet above ground surface;
- Close the existing Gold Acres heap leach facility, transfer any solutions to the existing Pipeline mill process circuit, move the ore on the pad to the SAHL for further processing, and dismantle the leach pad, ponds, and other structural components;
- Increase the height of the approved Area 28 Integrated Heap Leach/Tailings facility up to a maximum of 350 feet above ground surface;
- Increase the waste rock dump height from 250 feet to 300 feet above ground surface, with some areas that may exceed this height (up to 350 feet) in order to achieve a visually desirable irregular reclamation surface;
- Increase the approved mining rate from an average 150,000 tpd with a maximum of 250,000 tpd to an average of 350,000 tpd with a maximum of 500,000 tpd;
- Construct an additional waste rock dump (above original grade) on the backfilled portion of the open pit;
- Construct additional waste rock facilities above translocated waste rock in portions of the expanded open pit and the Gap waste rock dump adjacent to the expanded open pit to a height of 250 feet above ground surface;
- Processing of ore at the approved Cortez facility without modification to the facility;
- Install ground water extraction wells (ground water extraction from the existing and planned wells would not exceed the approved annualized average rate of up to 34,500 gpm; and

- Continue management of mine dewatering as outlined in the Pipeline Infiltration EA (BLM 1998) and South Pipeline Final EIS (BLM 2000a).

The distribution of surface disturbance between the various Project components is presented in Table 3.1.1. The table also includes the existing/previously approved surface disturbance within the Project Area and the differences between the approved project and the Proposed Action.

Table 3.1.1: Summary of Approved and Proposed Surface Disturbance

Mine Facility Component		Disturbed Acres		
		Approved	Proposed Action	Combined Total
MINE AND PROCESS AREA				
Open Pits	Pipeline/South Pipeline Open Pit	846	470	1,316
	South Pipeline Adjustment Zone	75	122	197
	Subtotal:	**921**	**592**	**1,513**
Ore and Process Facilities	Pipeline Plant Site	56		56
	Plant Expansion/Ore Stockpile	77		77
	Pipeline/South Pipeline Tailings	878		878
	Pipeline Heap Leach Expansion	54		54
	Pipeline/South Pipeline Heap Leach Facility	758		758
	Gold Acres Heap Leach	49		49
	Subtotal:	**1,872**	**0**	**1,872**
Waste Rock Dumps	Pipeline/South Pipeline/Crescent Waste Rock Dump[1]	1,813	-67	1,746
	Gap Waste Rock Dump		125	125
	Subtotal:	**1,813**	**58**	**1,871**
Support Facilities	Soil Stockpiles	18		18
	Plant Area Roads	31		31
	Plant Access Corridor	56		56
	Airport Gravel Pit	487		487
	Frome Gravel Pit	45		45
	Ancillary Facilities/Roads[2]	1,664	-650	1,014
	County Road Construction/Cortez Access Road	79		79
	Drainage Diversions	21		21
	Subtotal:	**2,401**	**-650**	**1,751**
Total Mine and Process Area:		**7,007**	**0**	**7,007**
OTHER AREAS OF DISTURBANCE WITHIN THE PROJECT AREA				
Exploration Activities		91		91
Mine Water Infiltration Basins/Pipelines/Ditches		578		578
Total Ancillary Area:		**669**	**0**	**669**
TOTAL PROJECT AREA SURFACE DISTURBANCE:		**7,676**	**0**	**7,676**

1 - The 67 acre decrease in the waste rock dump is due to the expansion of the open pit into the approved disturbance areas for the waste rock dump.
2 - The 547 acre decrease in the ancillary facilities/roads is due to the expansion of the open pit and the Gap waste rock dump into the approved disturbance areas for the ancillary facilities/roads.

3.1.1 Mining and Development Activities

The Proposed Action would also utilize, without modification, many of the same existing CGM facilities or equipment used for other CGM operations, including the Cortez CFB roaster, the CIL mill and tailings facility, and the Pipeline/South Pipeline ancillary facilities (administrative offices and support facilities, fresh water production supply wells, power supply and utilities, waste disposal and sanitary systems, chemical storage and hazardous material management facilities, production dewatering wells, turbine pumps, main discharge lines, conveyance lines and infiltration basins, roads, fencing, and security and fire protection systems) (BLM 2000a, Figure 2.2.1 page 2-11). The use and occupancy of these facilities would be in compliance with 43 CFR 3715, which regulates the storage of equipment and supplies, occupancy of structures, and structures on public land that restrict public access.

An estimated 110 million tons of ore could be mined in Stages 8 through 12 (Stages 1 through 7 are discussed in Section 2.2) under the Proposed Action. This would result in the production of approximately 6.5 million ounces of gold, negligible amounts of silver, and byproduct production of minor amounts of other metals. A majority of this ore would be leached on existing heap leach pads; the remainder would be processed at the approved Pipeline mill and tailings facility, at the existing Cortez mill, the Cortez roaster and tailings facility, or in the case of refractory mill-grade ore, continued shipments offsite for processing. The waste-to-ore ratio is approximately 5.4:1, resulting in approximately 590 million tons of waste rock that would also be mined under the Proposed Action. The waste rock would be deposited on the approved/expanded Pipeline/South Pipeline waste rock dumps, and/or sequentially backfilled into the mined-out portions of open pits, and/or on a new dump planned on top of the completely backfilled Pipeline/South Pipeline portion of the open pit, and/or the Gap waste rock dump (Stage 9) (Section 3.1.2.2).

The Proposed Action would utilize the same mining methods that are used to mine the Pipeline/South Pipeline open pit. See Section 2.2 as well as the Pipeline Final EIS (BLM 1996a, pages 2-10 to 2-11) and South Pipeline Final EIS (BLM 2000a, pages 3-7 through 3-10).

The Project would increase the time for dewatering by up to seven years and could ultimately result in one pit lake of up to 750 acres, or two or three smaller lakes that would total less than 750 acres. The actual size of the lake(s) would depend upon final open pit design based on the actual extent of mining (described in detail in Section 3.1.2), ongoing exploration activities and economic conditions, and the amount of waste rock hauled into mined-out areas.

Waste rock from the expansion of the Pipeline/South Pipeline mine has been extensively characterized for its potential to generate acid and to leach trace metal contaminates into the environment. Forty-two samples of representative waste were subjected to acid base accounting (ABA) and humidity cell testing during the South Pipeline Expansion Waste Rock Evaluation (Geomega 2002a) in addition to the 25 humidity cell tests performed in support of the South Pipeline Final EIS. Test results were similar to those reported in the South Pipeline Final EIS; all samples are acid neutralizing and exhibit excellent leachate quality.

As required by the NDEP, quarterly samples of distinct waste rock units mined from the open pit(s) are subjected to meteoric water mobility and acid base accounting tests. The results of these tests guide the management of waste rock at the mine. In the event that localized acid generating waste rock is encountered during mining, internal sections of the waste rock dumps would be utilized to

isolate, encapsulate, and/or appropriately mix with neutralizing high carbonate material. A waste rock management plan would be developed prior to any material being placed into the pit as part of the translocation of waste rock program. This would ensure that any waste rock placed below the ultimate pit lake water level would consist of material that would not negatively impact the water quality of the future pit lake.

3.1.2 Pipeline/South Pipeline Open Pit Expansion

The expansion of the South Pipeline open pit would extend the existing Pipeline/South Pipeline open pit to the east, southeast, and southwest. The proposed open pit surface disturbance would increase from the approved 921 acres to approximately 1,410 acres. A 200-foot wide zone around the open pit, consisting of approximately 190 acres, could be used as an adjustment zone to modify the open pit rim should it be determined necessary for safety or engineering reasons. This increased disturbance falls within the approved disturbance footprint, which includes approximately 422 acres of Ancillary Facilities and 67 acres of the South Pipeline Waste Rock. The open pit area at the end of mining activities (Stage 12) would be approximately 750 acres if backfilling and translocation of waste material were implemented.

The open pit rim would be at an elevation of 5,060 feet amsl and the bottom of the open pit would be no deeper than 3,400 feet amsl. The current plan for the completion of the Pipeline/South Pipeline open pit would result in a single open pit with an irregular bottom. An estimated 110 million tons of ore and 590 million tons of waste rock would be mined from the Pipeline/South Pipeline open pit expansion area under the Proposed Action, although economic conditions could modify the open pit configuration and tonnages mined during the life of the Project.

Mining under the Proposed Action would continue to occur in Stages 8 through 12 (see Section 2.2 for a description of Stages 1 through 7), which are described as follows: a) Stage 8: mine ore from the Pipeline/South Pipeline open pit; b) Stage 9: mine ore from the South Pipeline open pit; c) Stage 10: mine ore from the Crossroads open pit; d) Stage 11: mine ore from the Gap open pit and continue to mine ore from the Crossroads open pit; and e) Stage 12: mine ore from the Gap open pit to the extent of economic mineralization. The mining stages are outlined in the following sections and are assessed as distinct Project actions in order to determine the level of impacts related to each Stage, since mining could be discontinued at the conclusion of any consecutive Stage. Potential impacts of each Stage are evaluated individually in this SEIS. Plan views and cross sections of these distinct Stages of the Proposed Action have been prepared and are included in the following sections.

The incorporation of backfilling into the planned activities under the South Pipeline Project was approved subject to further investigations, as a result of analysis to address the potential impacts to wildlife, particularly because of concentrations of methylmercury, identified in the South Pipeline Final EIS (BLM 2000a, Pages 4-135 to 4-137). The analysis refined the assessment of methylmercury, as well as fully evaluate hydrochemistry issues and are incorporated into the report titled Pit Lake Chemistry Assessment for the Pipeline/South Pipeline Pit Expansion Project (Geomega 2003b). The conclusion of the report is that the methylmercury levels in the pit lake under the Proposed Action are within the limits of the aquatic water quality standards.

Subsequent to the distribution of the Draft SEIS, CGM has made some minor revisions to the configuration of Stages 8 and 9. These changes result in a relocation of the western pit rim to the west for safety and to mine some recently defined ore reserves. These changes remain in the previously approved 7,676 acre footprint. Figure 3.1.1 shows the original planned outline of Stage 8, which is the same as Stage 9. Figure 3.1.3 shows the revised outline for the west rim of the open pit under Stages 8 and 9. The potential hydrogeologic impacts of this minor revision are analyzed in the appropriate sections in Chapter 4 as a supplemental analysis. The expanded Stage 9 push back would slightly overlap the planned Gap open pit (Stages 11 and 12). However, the intersection occurs at elevations substantially higher than the predicted final pit lake. Therefore, the above assumptions on pit lake configurations in the original analysis remain valid.

3.1.2.1 Stage 8

Stage 8 of the mine plan would include deepening the Pipeline/South Pipeline open pit. Stage 8 would be mined to a depth of 1,100 feet below ground surface. The waste from Stage 8 would be used to partially backfill a portion of the Pipeline/South Pipeline open pit to ground elevation (5,100 feet amsl) or could be transported to the approved Pipeline/South Pipeline waste rock dump. If mining were to cease at Stage 8, neither the Crossroads nor Gap deposits would be mined and one large lake would form in the Pipeline/South Pipeline open pit (Figures 3.1.1 and 3.1.2).

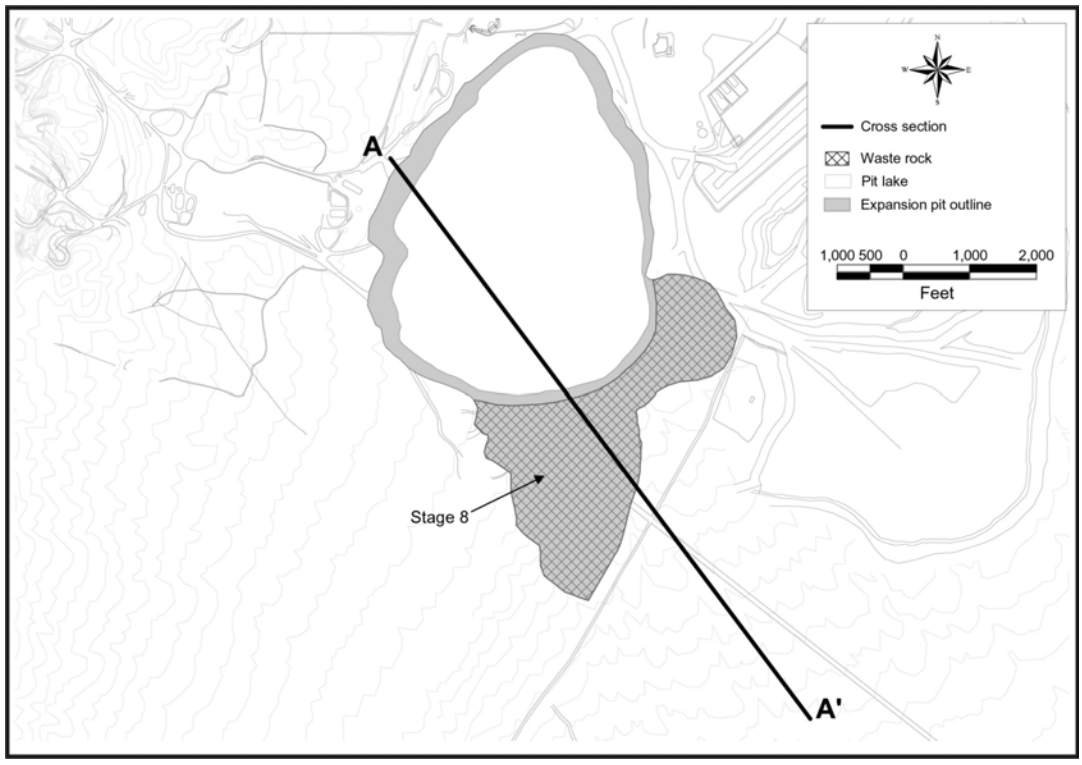

Figure 3.1.1: Stage 8 Plan View Pipeline/South Pipeline Open Pit

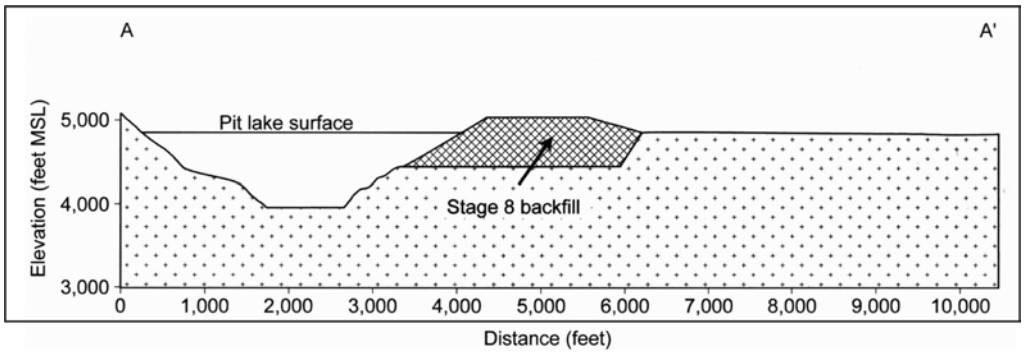

Figure 3.1.2: Stage 8 Cross Section A to A' through Pipeline/South Pipeline Open Pit

3.1.2.2 Stage 9

Stage 9 of the mine plan would include continued mining of the Pipeline/South Pipeline open pit. Stage 9 would be mined to a depth of 1,250 feet below ground surface. The waste from Stage 9 would be placed on top of the Stage 8 partial backfill to a height of 250 feet above ground surface (5,350 feet amsl). If mining were to cease at Stage 9, neither the Crossroads nor Gap deposits would be mined and one pit lake would form in the Pipeline/South Pipeline open pit. Figures 3.1.4 and 3.1.5 illustrate this scenario.

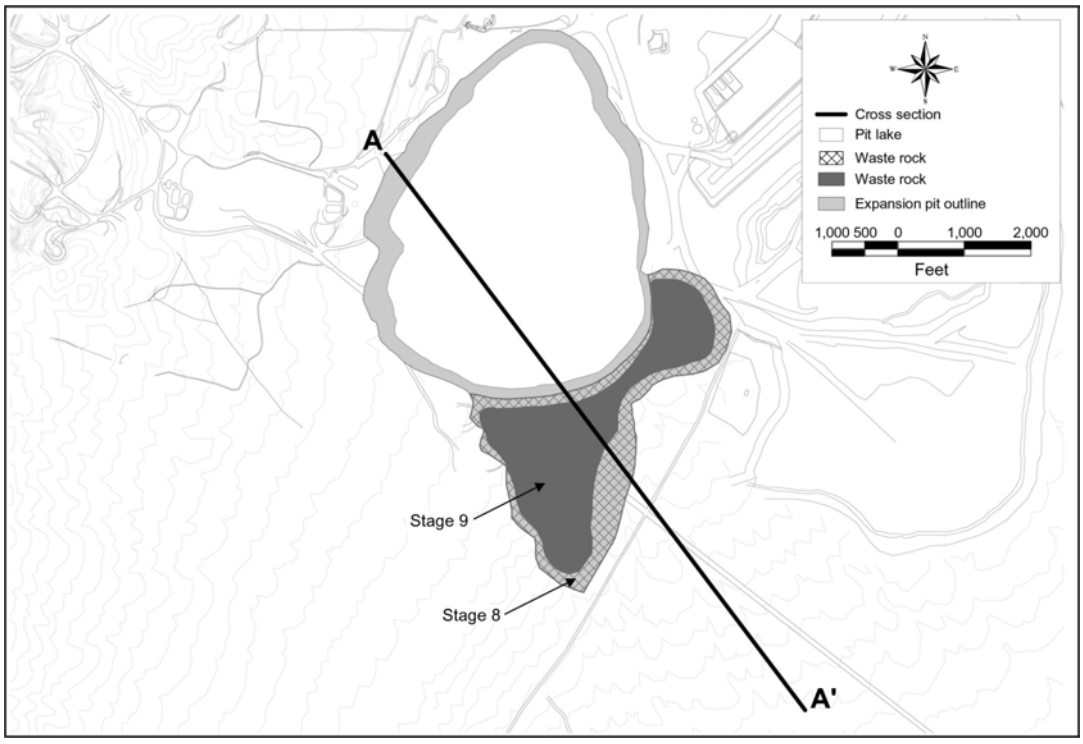

Figure 3.1.4: Stage 9 Plan View Pipeline/South Pipeline Open Pit

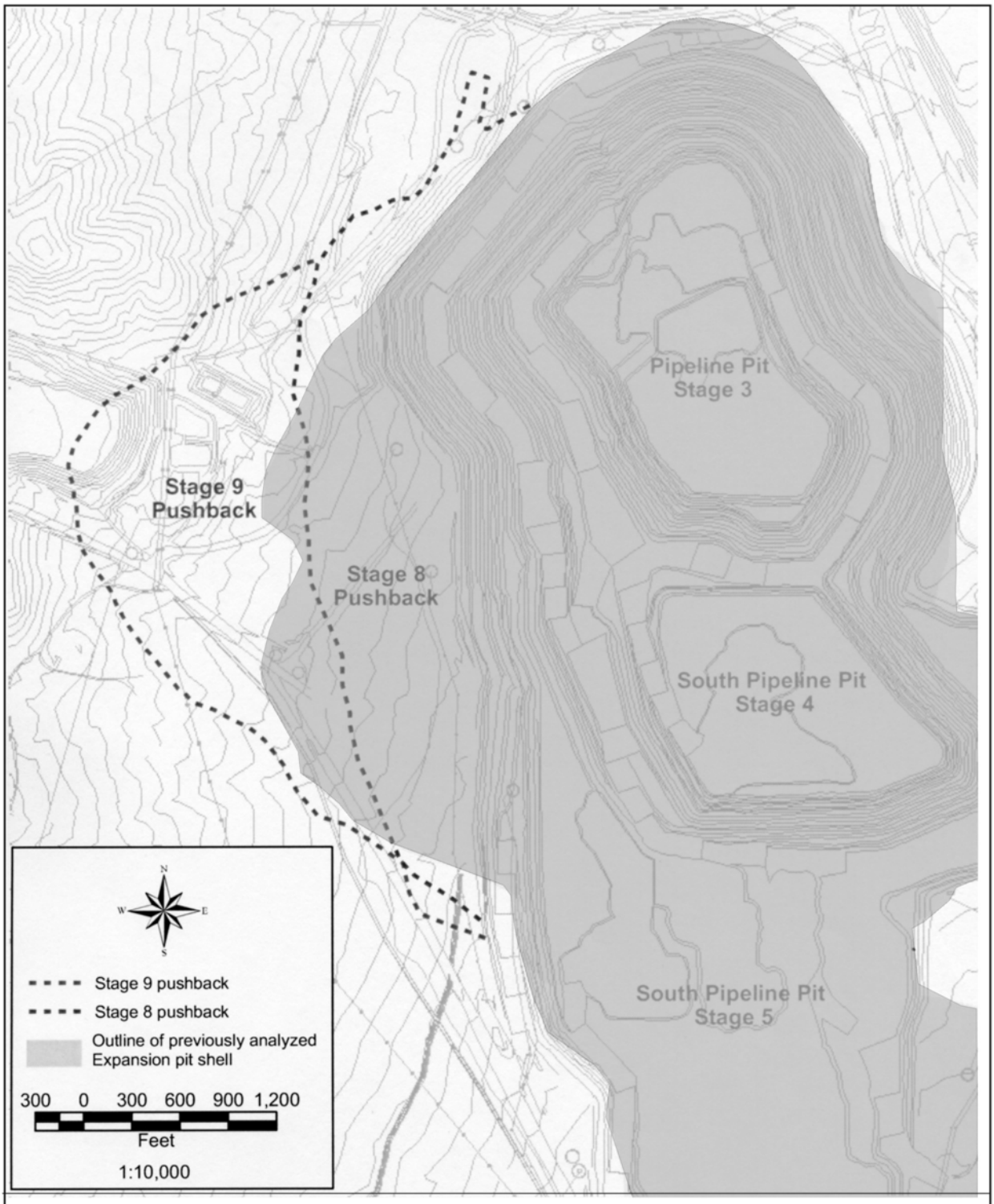

Figure 3.1.3 Stages 8 and 9 Plan View of Open Pit West Rim Revision

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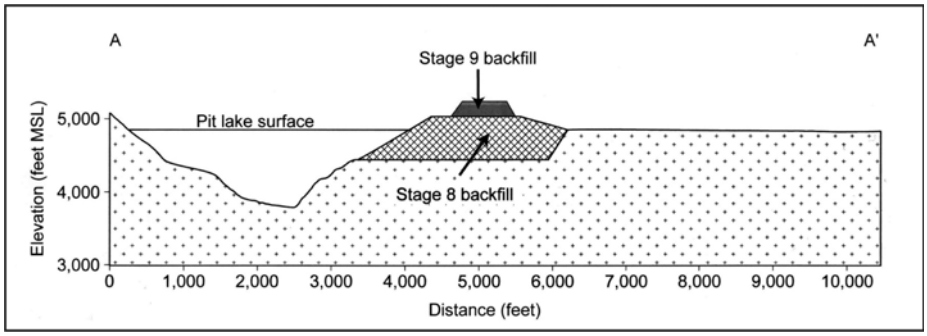

Figure 3.1.5: Stage 9 Cross Section A to A' through Pipeline/South Pipeline Open Pit

3.1.2.3 Stage 10

Stage 10 of the mine plan would include mining from the Crossroads open pit. Ore and waste would be excavated down to an elevation no deeper than 3,700 feet amsl in the Pipeline/South Pipeline area and to an elevation no deeper than 4,000 feet amsl in the Crossroads area. The waste from Stage 10 would continue to be backfilled into the southern part of the Pipeline/South Pipeline open pit to ground surface (5,100 feet amsl), placed upon the Pipeline/South Pipeline waste rock dump, and/or placed upon the Gap waste rock dump. If mining were to cease at Stage 10, two separate pit lakes would form: one in the Pipeline/South Pipeline open pit and one in the Crossroads open pit. Figures 3.1.6 and 3.1.7 illustrate this scenario.

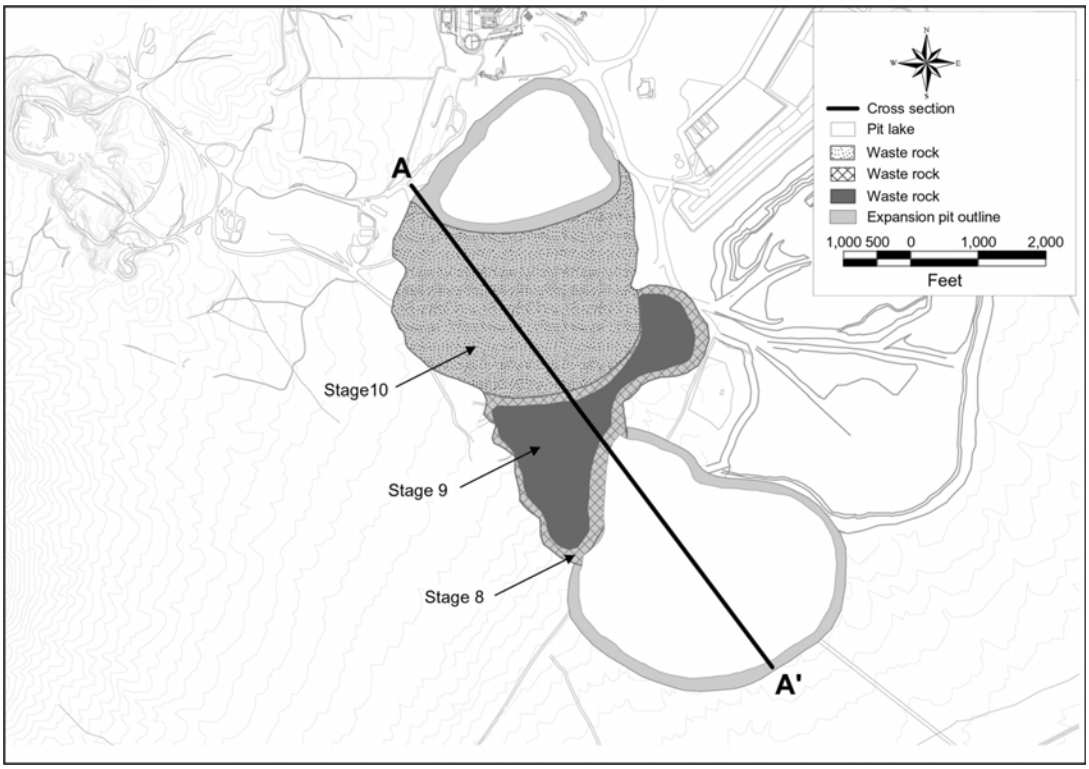

Figure 3.1.6: Stage 10 Plan View Pipeline/South Pipeline Open Pit

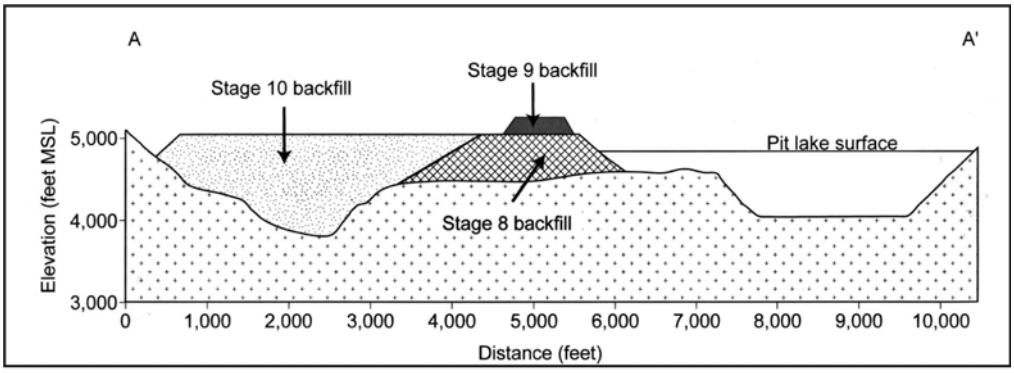

Figure 3.1.7: Stage 10 Cross Section A to A' through Pipeline/South Pipeline Open Pit

3.1.2.4 Stage 11

Stage 11 of the mine plan would include continued mining in the Crossroads open pit down to an elevation no deeper than 3,400 feet amsl and mining would begin in the Gap deposit. Waste rock from both the Crossroads and Gap open pits would be backfilled into the Pipeline/South Pipeline open pit or placed on the approved Pipeline/South Pipeline waste rock dump and/or the Gap waste rock dump. If mining were to cease at Stage 11, four separate pit lakes would form: one in the Crossroads open pit, one in the Pipeline/South Pipeline open pit, and two in the Gap open pit. Figures 3.1.8 and 3.1.9 illustrate this scenario.

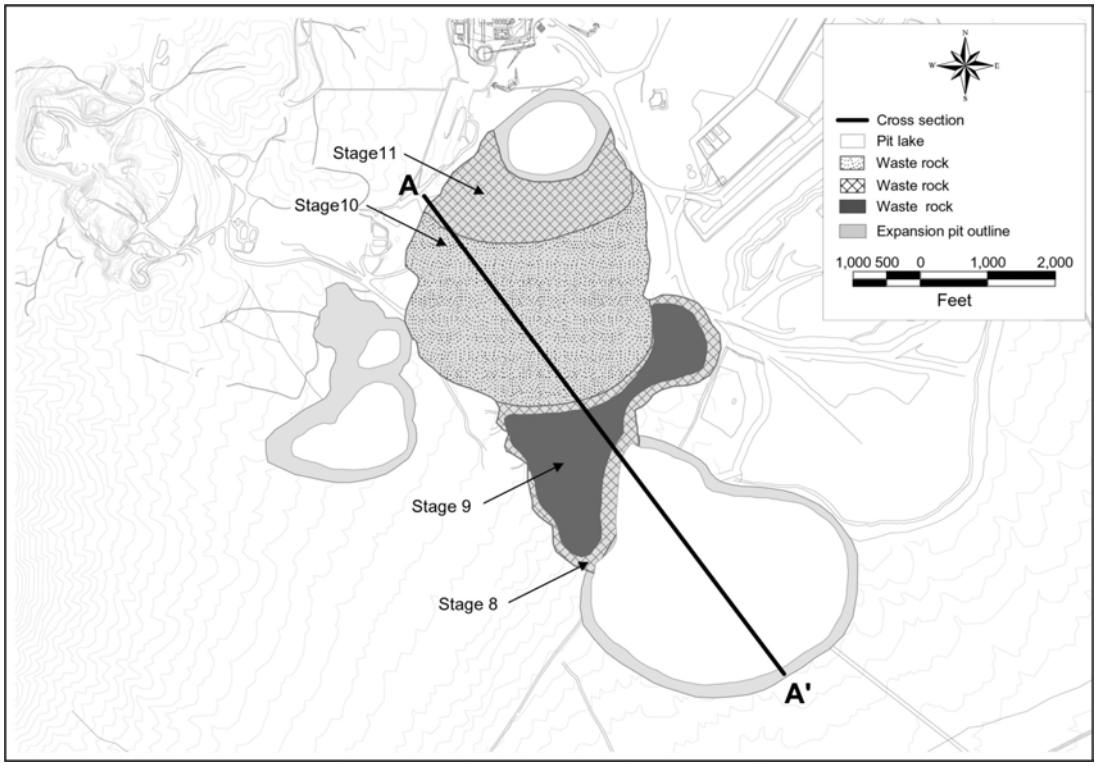

Figure 3.1.8: Stage 11 Plan View Pipeline/South Pipeline Open Pit

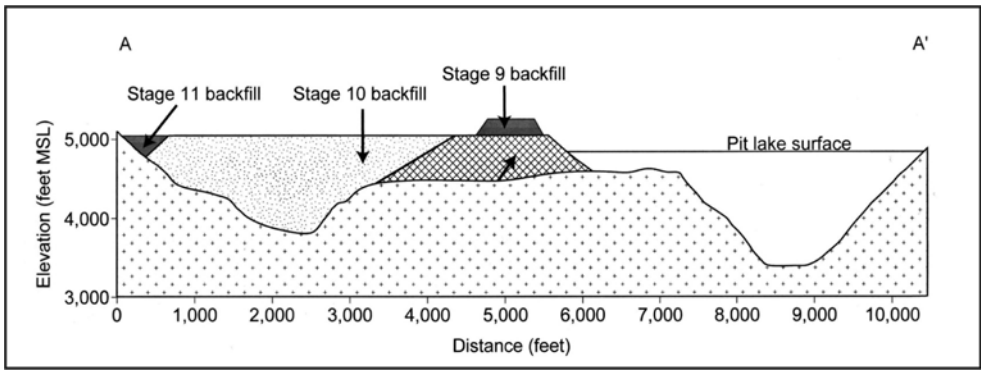

Figure 3.1.9: Stage 11 Cross Section A to A' through Pipeline/South Pipeline Open Pit

3.1.2.5 Stage 12

Stage 12 of the mine plan would include continued mining in the Gap open pit to an elevation no deeper than 4,420 feet amsl. Waste rock from the Gap open pit would complete the backfill of the Pipeline/South Pipeline open pit or be placed on the approved Pipeline/South Pipeline waste rock dump and/or the Gap waste rock dump. If mining were to cease at Stage 12, two pit lakes would form: one in the Crossroads open pit and one in the Gap open pit. Figures 3.1.10 and 3.1.11 illustrate this scenario.

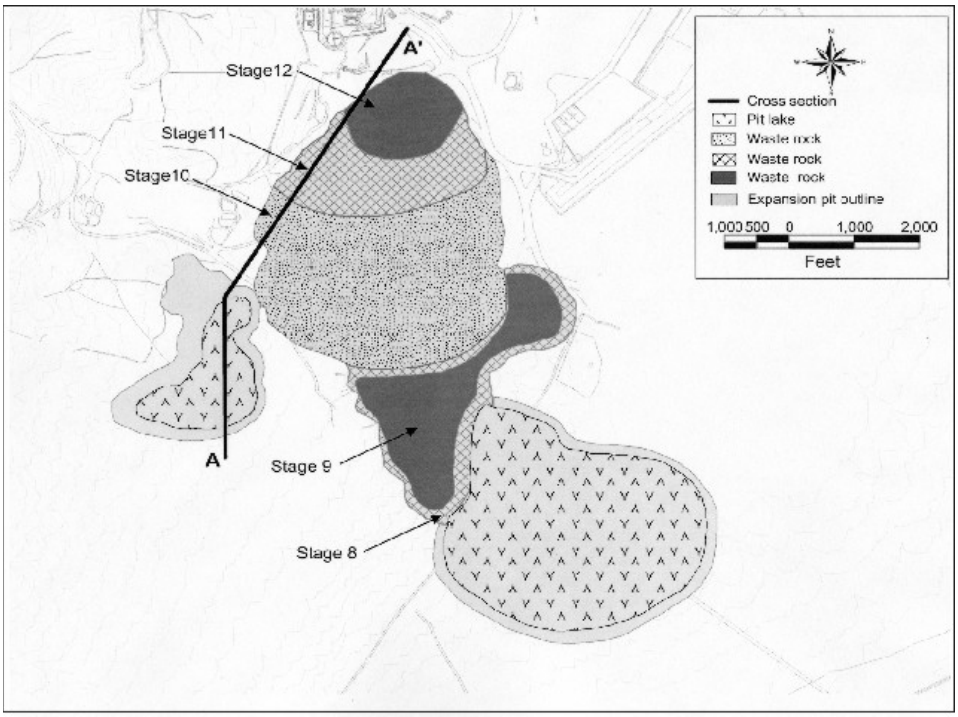

Figure 3.1.10: Stage 12 Plan View Pipeline/South Pipeline Backfilled Pit and the Gap Open Pit

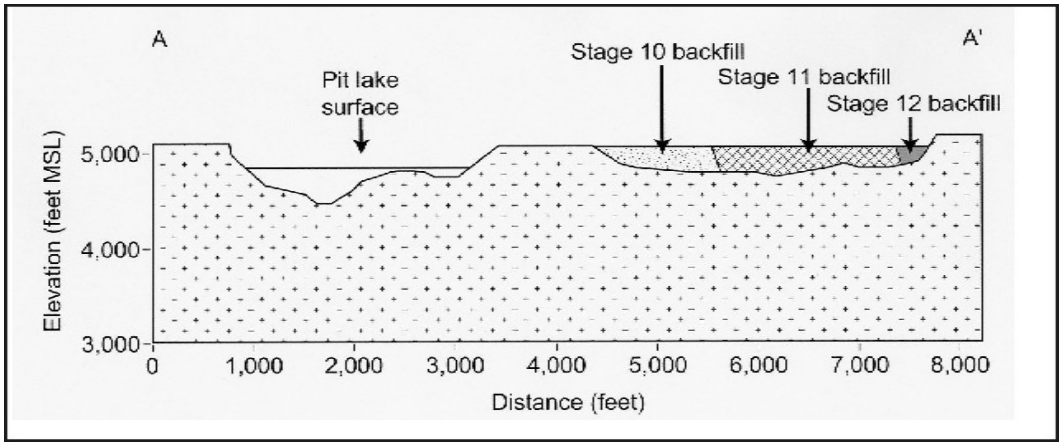

Figure 3.1.11: Stage 12 Cross Section A to A' through Pipeline/South Pipeline Backfilled Pit and the Gap Open Pit

3.1.3 Waste Rock Disposal

The estimated overburden and waste rock mined as part of the Proposed Action would be up to 590 million tons. A portion of the materials to be moved would come from the southern end of the existing Pipeline waste rock dump. This would be necessary in order to mine a section of the open pit expansion area.

The rehandled Pipeline waste rock dump material and newly mined overburden and waste rock would be hauled to one or more of the following sites: 1) the permitted Pipeline and South Pipeline waste rock dumps; 2) the mined-out portions of open pits; 3) the new Gap waste rock dump, which would be 125 acres that was previously approved surface disturbance under Ancillary Facilities; and/or 4) the new waste rock dump planned for the top of the completely backfilled portion of the Pipeline/South Pipeline open pit (Figure 3.1.9). The Stage 9 waste rock dump on the backfilled portion of the open pit would reach a height of 250 feet above the original pre-pit ground surface (5,350 feet amsl to the top of the waste rock dump). The Pipeline and South Pipeline waste rock dumps would be increased from the permitted height of 250 feet above ground surface to 300 feet above ground surface. This 50-foot elevation increase would accommodate the additional waste rock mined from the expanded open pit(s).

Placement of overburden and waste rock material back into mined-out open pits is part of this Proposed Action, subject to approval by the BLM and NDEP. In the event that acid generating waste rock was encountered locally during mining, internal sections of the waste rock dumps would be utilized to isolate, encapsulate, and/or appropriately mix with neutralizing high carbonate material. The material used would not substantially impact the projected pit lake water quality. These activities would be performed in accordance with the South Pipeline Waste Rock Management Plan. The total tonnage of materials placed in the open pit would be up to 300 million tons.

The stability of the in-pit waste rock dump was evaluated by Golder and Associates (Golder 2002). The analysis assumed that the in-pit dumps would be constructed with waste rock and no alluvium would be used. Slopes would be completed to an overall 2.5H:1V configuration. Based on these assumptions, the development of in-pit waste rock dumps that would be inundated by the pit lake

would be sufficiently stable and no additional control measures would be necessary to ensure slope integrity during static or pseudo-static conditions.

3.1.4 Ore Processing Facilities

The mill grade ore from the Proposed Action would be processed in the Pipeline/South Pipeline mill and tailings facility at a rate of up to 13,500 tpd. In addition, a portion of the mill grade ore from the open pit expansion may be hauled to the Cortez mill and tailings facility and processed at a rate of 2,000 tpd. Lower grade ores from the proposed Project may be processed at the existing Pipeline/South Pipeline heap leach facility and/or the SAHL facility. All of these facilities are described in the South Pipeline Final EIS (BLM 2000a, pages 3-14 through 3-18). CGM has entered into a processing agreement with a third-party operator to process roast ore. This arrangement, or a similar one, may continue during the mining of the open pit expansion area. Ore processing for the Proposed Action is as follows:

- A majority of the 110 million tons of ore would be leached on the existing and approved SAHL pad;
- The Area 28 Integrated Heap Leach/Tailings facility would increase in height up to a maximum of 350 feet;
- The height of the SAHL facility would be increased to 300 feet from the 250-foot height approved as part of the South Pipeline Final EIS (BLM 2000a, page 3-16 through 3-17);
- The remainder of the ore would be processed at the approved Pipeline/South Pipeline mill and tailings facility and at the existing Cortez mill, roaster, and tailings facility; and
- Refractory mill-grade ore would continue to be shipped offsite for processing.

3.1.5 Other Project Activities

The existing support facilities described in Section 2.6 and in the South Pipeline Final EIS (BLM 2000a, pages 2-22 through 2-26) and Chapter 2 of this SEIS would remain the same with the exception of equipment. The proposed increase in mining rates may require the use of larger electric shovels and trucks. The Project would continue to consumptively use up to 10,000 gpm of dewatering water for Project related activities. Exploration activities would continue, as approved in the South Pipeline Plan of Operations and the South Pipeline Final EIS (BLM 2000a, page 2-26). The noxious weed monitoring and control program as approved in the Pipeline Plan of Operations (CGM 1992) and as updated for the Horse Canyon/Cortez Unified Exploration Project (BLM 2000b) would remain in effect for the Proposed Action. Modifications to the weed program would be made as needed, in consultation with the BLM.

As a result of the revision to the western open pit rim under Stage 9, the open pit would impact a portion of the Gold Acres heap leach facility and pad. Prior to mining in this area under the Proposed Action, the existing Gold Acres heap leach facility would be closed, any solutions would be transferred to the existing Pipeline mill process circuit, and the ore on the pad would be moved to the SAHL for further processing. The leach pad, ponds, and other structural components would be dismantled.

3.1.6 Mobile Equipment

The mobile equipment to be utilized for the Project is outlined in Table 3.1.2.

3.1.7 Reclamation

CGM would conduct reclamation activities in accordance with BLM surface management regulations 43 CFR 3809 and State of Nevada regulations NAC 519A. Reclamation plans outlined in this section address areas of disturbance caused by the Proposed Action and are presented in detail in the Reclamation Plan for the Project (CGM 2001a).

Table 3.1.2: Planned Mobile Equipment

TYPE OF EQUIPMENT	MAXIMUM NUMBER OF UNITS IN THE PROJECT AREA[1]
Electric Shovels	3
Production Loaders/Hydraulic Shovels	5
Haul Trucks (85 - 400 ton)	30
Rotary Drills	6
Track Bulldozer	7
Rubber Tired Bulldozer	5
Motor Grader	5
Water Trucks	5
Support Loaders	3
Blasting Trucks	3

1 - Contract mining may require additional equipment above the listed CGM-owned mobile equipment.

The waste rock dumps would be reclaimed to meet certain general objectives including the following: stable slopes, reduced slope erosion, mass stability, rounded edges, revegetated surfaces, and control of sediment. The final slopes of the reclaimed waste rock dumps would be at an overall average of 2.5 horizontal (H):1 vertical (V) to 3H:1V. Final reclamation contours would be constructed to create a landform with a more natural appearance and to reduce surface water flow velocities.

During reclamation, the outer slopes would be irregularly contoured to achieve natural-looking overall slopes with a rounded crest, producing a more natural appearance and providing microclimates for revegetation success. The top of the dump would be scarified to break up the compacted surface and would not be regraded except to meet drainage requirements.

Reclamation of the waste rock dump would be conducted concurrently with regular mine operations. As areas of the waste dump reach their ultimate height and become inactive, the dump face slope would be recontoured to an overall average of 2.5H:1V. If the waste rock were not suitable as growth media (such as alluvium mined from the open pit), the surfaces would be covered with six to 24 inches of stockpiled soil or growth media. A sufficient amount of growth media is available to complete the planned reclamation activities. The area would then be seeded with the seed mixture outlined in the South Pipeline Plan of Operations (CGM 1996, page 6-4) and Plan (CGM 2001a, page 6-7).

The decommissioning of the heap leach facilities was discussed in the South Pipeline Plan of Operations (CGM 1996, page 6-11). The heap leach facility, including process components, would be decommissioned in accordance with relevant BMRR regulations and guidelines for closure. Slope grading and covering for the higher heap leach pad would conform to the standards approved in the South Pipeline Plan of Operations (CGM 1996, page 6-10) and Plan (CGM 2001a, page 6-6). Chemical stabilization for the heap leach pads is discussed in the South Pipeline Plan of Operations (CGM 1996, page 6-11) and the Pipeline/South Pipeline Pit Expansion Plan of Operations (CGM 2001a, page 6-8).

In cooperation with the NDOW and the BLM, CGM may create features or construct structures on the reclaimed disturbance that would encourage use by wildlife during the mining operation and post closure. These may include water guzzlers, rock piles, shaped waste rock dumps, and/or access points for wildlife use of the post-mining pit lake.

3.1.8 Monitoring and Reclamation Success Evaluation

Post-reclamation monitoring would be conducted in consultation with the BLM and BMRR. Revegetation monitoring would be conducted for a minimum of three years following implementation of revegetation activities or until the achievement of revegetation success. Revegetation monitoring would occur based on seasonal growth patterns, precipitation, and weather conditions. The revegetation standards developed for the Pipeline Project would also be utilized for the Project (CGM 1996, Appendix F), or as modified by agency/CGM agreement. Upon approval of the permanent closure plan, post-mining ground water quality would be monitored according to the requirements established by the BMRR.

3.1.9 Environmental Protection Measures

In addition to the commitments previously made by CGM and outlined in Section 2.9, CGM would carry out the following measures to prevent unnecessary or undue degradation of the environment:

- BMPs would be implemented to limit erosion and reduce sediment runoff from Project areas. BMPs may include diversion ditches, sediment traps, and rock and gravel cover.

- Disturbed areas would be revegetated (seeded) as soon as practicable to minimize wind and water erosion. Concurrent reclamation would be maximized to the extent possible in order to accelerate revegetation efforts.

- All process components would be designed, constructed, and operated in accordance with BMRR regulations and the BLM Cyanide Management Policy.

- The proposed heap leach facility would be a zero discharge facility and would have a double lined leak detection system in accordance with BMRR design criteria.

- The expanded waste rock dumps have been evaluated for potential to generate acid rock drainage (ARD) or sediment and would be monitored routinely.

- The Hazardous Materials Spill and Emergency Response Plan contained in the Pipeline Final EIS (BLM 1996a) would be amended to include new components needed for the open pit expansion.

- Monitoring of the proposed Project would be performed in accordance with the provisions of NDEP and BLM approved permits.

- Growth media and soil salvage and storage procedures would continue, as approved in the Pipeline and South Pipeline Plans of Operation (CGM 1992; CGM 1996, page 5-19) and as proposed in the Plan (CGM 2001a, page 6-2).

- The Noxious Weed Monitoring and Control Program as outlined in the Pipeline Plan of Operations (CGM 1992) (updated in 2000) would remain in effect for the proposed Project.

3.2 Alternatives to the Proposed Action

The NEPA (42 United States Code [USC] 4322(E)) requires that an EIS "... study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." Chapter V, Section B.1.e.(2) of the BLM NEPA Handbook directs that "... reasonable alternatives to this proposed action - including the no action alternative which reflects continuation of the current management practices or denial of the action - must be defined." This section of the BLM NEPA Handbook continues by stating that "Each alternative, except the no action alternative, should represent an alternative means of satisfying the identified purpose and need of resolving issues. The rationale for considering but not selecting for further analysis certain suggested alternatives must be documented, especially those suggested by the public or other agencies." EIS preparers are directed to "consult program-specific guidance for additional requirements on alternatives."

The inclusion of alternatives in the SEIS would be based on the following specific criteria: a) public or agency concern; b) technical or economic feasibility; c) the potential to reduce an environmental impact of the Proposed Action; and d) the ability to meet the purpose of and need for the Action. The Scoping Document organized comments received during public scoping by resource type and Project issues, and included recommendations on alternatives to be analyzed in the SEIS. The Project Scoping Document is on file and available for review at the BLM Battle Mountain Field Office during normal business hours. Alternatives to the Proposed Action (as currently defined) identified during scoping include the following:

- No Action;

- Complete Backfill; and

- No Backfill.

This section of the SEIS discusses alternatives to the Proposed Action and identifies which alternatives are to be analyzed in the remainder of the SEIS along with the Proposed Action. Three alternatives have been identified for analysis in the SEIS along with the Proposed Action: the No Action Alternative, the Complete Backfill Alternative, and the No Backfill Alternative. The

alternatives are discussed in the following section. In addition, other alternatives were reviewed, considered, and eliminated from detailed consideration in the South Pipeline Final EIS (BLM 2000a, Section 3.15.4, pages 3-32 to 3-35).

3.2.1 No Action Alternative

In accordance with BLM NEPA guidelines H-1790-1, Chapter V (BLM 1988), the SEIS evaluates the No Action Alternative. The objective of the No Action Alternative is to describe the environmental consequences that would result if the Proposed Action were not implemented. The No Action Alternative forms the baseline from which the impacts of all other alternatives can be measured.

Selection of the No Action Alternative would generally be inconsistent with the BLM multiple use mission and policy of making public lands available for a variety of uses, provided these uses are conducted in an environmentally sound manner. The subject lands were not withdrawn for any special use, and were open unappropriated lands when unpatented mining claims were located.

Under the No Action Alternative, CGM would not expand on the Pipeline/South Pipeline ore body as currently defined, and one large pit lake would form at the end of mining in the Pipeline/South Pipeline open pit (Figure 3.2.1). CGM would continue operations at the Pipeline/South Pipeline Project, as previously approved. The No Action Alternative would result from the BLM disallowing the activities proposed under the Plan (CGM 2001a). The activities outlined in Chapter 2 of this SEIS describe the No Action Alternative. The area would remain available for future commercial gold processing or for other purposes, as approved by the BLM.

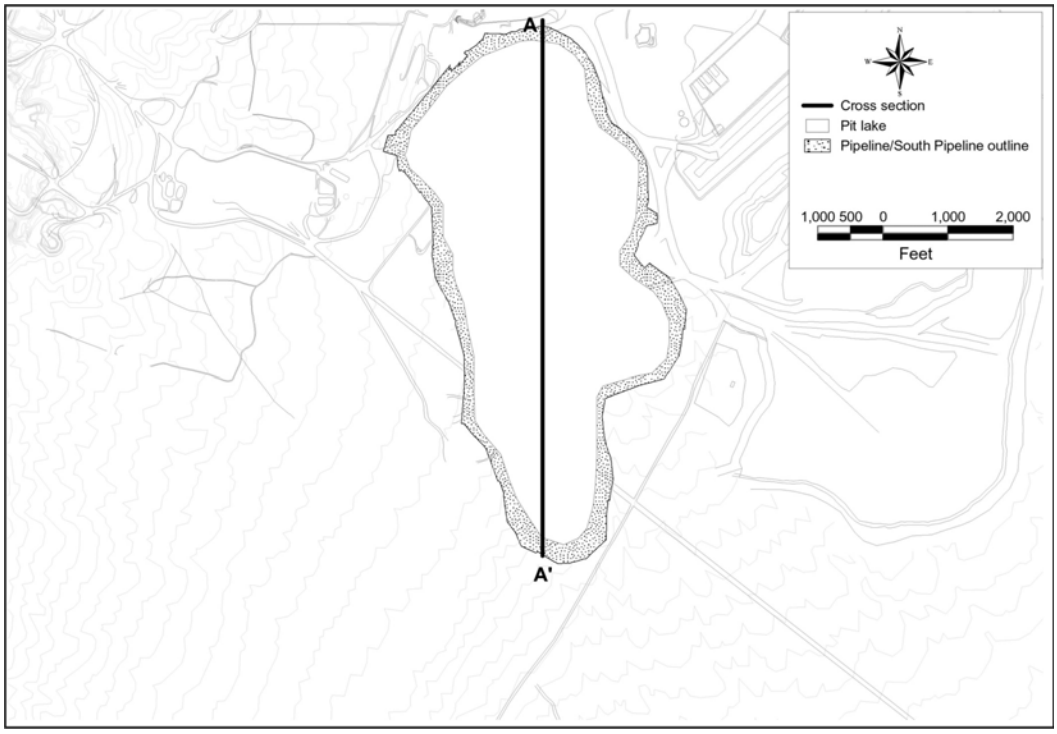

Figure 3.2.1: No Action Alternative

3.2.2 Complete Backfill Alternative

The Complete Backfill Alternative would require all waste rock from Stages 8 through 12 (Section 3.1.2) to be placed in the mined-out expanded Pipeline/South Pipeline and Gap open pits. The Complete Backfill Alternative is significantly different from the Proposed Action in that it would require the re-handling and translocation of all the mined waste rock. The elevation of the Pipeline/South Pipeline waste rock dump would temporarily increase and other temporary dump facilities would be constructed. At the end of mine life, waste rock from the dump facilities would be removed and placed back into the Pipeline/South Pipeline and Gap open pits. The backfill would be performed with the existing labor force and a pit lake would still form in the Crossroads open pit (Figure 3.2.2). Implementation of the Complete Backfill Alternative would result in no new surface area disturbance.

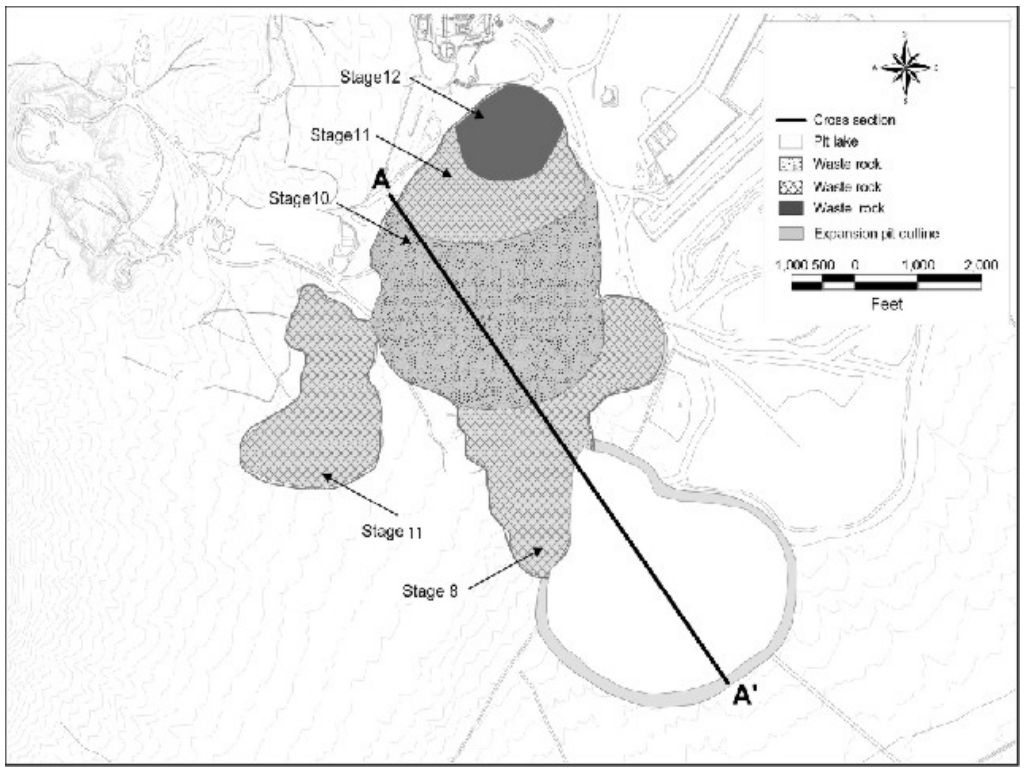

Figure 3.2.2: Complete Backfill Alternative

3.2.3 No Backfill Alternative

Under the No Backfill Alternative, the 590 million tons of waste rock that would be mined under the Proposed Action would need to be disposed of in the existing Pipeline/South Pipeline waste rock dump and on a new dump adjacent to the Gap open pit. The Gap dump, which would consist of both Pipeline/South Pipeline and/or Crossroads waste in addition to the Gap waste, would cover 500 acres at a height of 250 feet. In addition, the existing Pipeline/South Pipeline waste rock dump would require additional stacking to 500 feet in height to accommodate the additional waste. The Pipeline/South Pipeline waste rock dump footprint would also be extended across the entire permitted disturbance acreage, leaving no space for sideslope contouring and shaping. All other activities under the No Backfill Alternative would be the same as under the Proposed Action with the exception that

one large pit lake would form in the Pipeline/South Pipeline/Crossroads open pit and a small lake would form in the Gap open pit (Figure 3.2.3).

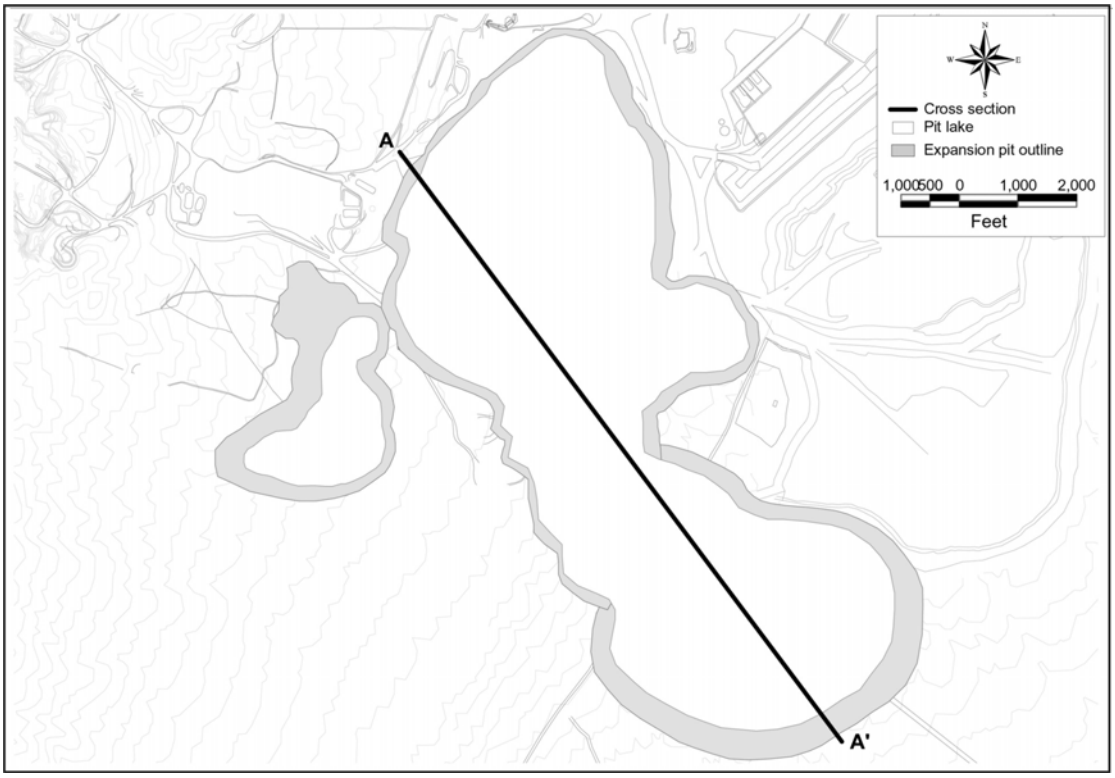

Figure 3.2.3: No Backfill Alternative

3.2.4 Alternatives Considered and Eliminated from Consideration

A number of alternatives were considered and eliminated from detailed consideration in the South Pipeline Final EIS (BLM 2000a, pages 3-32 through 3-35) and the Pipeline Final EIS (BLM 1996a, pages 2-41 through 2-47). They are incorporated by reference in this document.

3.2.5 BLM Preferred Alternative

Chapter V, Section B.2.b. of the BLM NEPA Handbook directs that "The manager responsible for preparing the EIS should select the BLM's preferred alternative. ... For externally initiated proposals, ... the BLM selects its preferred alternative unless another law prohibits such an expression. ... The selection of the preferred alternative should be based on the environmental analysis as well as consideration of other factors which influence the decision or are required under another statutory authority."

Thus, the BLM has selected a Preferred Alternative based on the analysis in this SEIS. This Preferred Alternative is the alternative that best fulfills the agency's statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. The BLM has determined that the Preferred Alternative is the Proposed Action as outlined in Chapter 3 with the inclusion of the identified mitigation measures to the Proposed Action as specified in Chapter 4.

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